

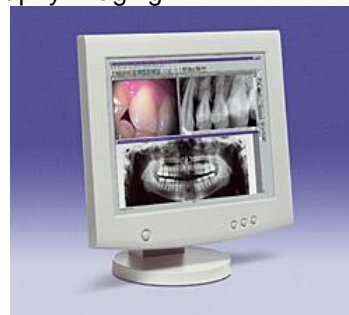
ProMax Panoramic X-Ray Unit (Project 02-25) (3/04)



The ProMax is a digital-capable, direct-current panoramic X-ray unit marketed by Planmeca USA. The ProMax is advertised as containing new Selectively Compliant Articulated Robot Arm (SCARA) technology. SCARA is said to allow panoramic arm movement analogous to that of human arm joints (i.e., shoulder, elbow, wrist) with micromotor focal-trough adjustment designed for precise imaging. ProMax imaging software is advertised as being based on human anatomical studies, and is said to automatically adjust radiation based on patient radiation transparency using Planmeca's proprietary Automatic Exposure Control system. For conventional panoramic films, the ProMax includes Autoprint, an automatic film marking system that annotates not only pertinent patient information but also inscribes the imaging program and exposure parameters. The ProMax is advertised as a multi-function imaging system. In addition to standard panoramic views, the unit is capable of

pediatric panoramic, TMJ, maxillary sinus, cephalometric, and linear tomography imaging.

ProMax digital imaging is based on Planmeca's Dimax2 digital sensor system. The Dimax2 can be used for both panoramic and cephalometric imaging and is designed to provide real-time imaging on the computer screen. Digital images can be manipulated and archived using Dimaxis DICOM-compliant imaging software. Dimaxis allows image enhancement and manipulation (i.e., zoom, contrast, brightness, rotation, measurement of distances and angles.) Images can be archived in either TIFF or JPEG format and may be hard copied by laser printer, thermal paper printer, or dry processing film printer. The ProMax weighs 248 pounds (282 pounds with ceph attachment) and requires a space 96" H x 59" W x 64" D, and is available in 120V, 60Hz and 230V, 50/60Hz electrical configurations.



Manufacturer:

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(877) 201-7085
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(630) 529-1929 FAX
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Suggested Retail Price:

\$32,214.00 ProMax Film-Based Panoramic X-ray including cassette

\$41,184.00 ProMax Film-Based Pan/Ceph

\$61,255.00 ProMax Digital Panoramic

Includes: Dimaxis2 software

Programs: Standard Panoramic

Pediatric Panoramic

Adjustable Angle TMJ

Lateral Double TMJ

Posterior-Anterior Double TMJ

Posterior-Anterior Rotational Sinus

Vertical Segmenting

\$3346.00 Digital Advanced Program Package

--Horizontal Segmenting

--Improved Orthogonality Panoramic

--Improved Interproximal Angulation Panoramic

--Double Lateral TMJ

- Double Posterior Anterior TMJ
- Double Lateral Posteroanterior TMJ
- 3-Angle Posteroanterior TMJ Left
- 3-Angle Posteroanterior TMJ Right
- 3-Angle Lateral TMJ Left
- 3-Angle Lateral TMJ Right
- Posterior-Anterior Non-Rotational Sinus
- Lateral Non-Rotational Sinus Left
- Lateral Non-Rotational Sinus Right
- Midsagittal Non-Rotational Sinus Left
- Midsagittal Non-Rotational Sinus Right

\$7895.00 Digital Linear Tomography Program

- Cross-Sectional
 - 1-4 cross-sectional images (manual)
 - 4 cross-sectional images (automatic)
 - 3 cross-sectional images with different angles, images can be viewed as stereo pairs (automatic)
 - 3 cross-sectional images from sinus, makes one wide image (automatic)
 - 3 cross-sectional images from nasal cavity, makes one wide image (automatic)
 - 4 cross-sectional images with anatomic margins (automatic)
- Longitudinal
 - 1-4 cross-sectional images (manual)
 - 4 longitudinal images (automatic)
 - 3 longitudinal images with different angles, images can be viewed as stereo pairs (automatic)
 - 3 longitudinal images from sinus, makes one wide image (automatic)
 - 3 longitudinal images from nasal cavity, makes one image (automatic)
- Mixed Cross-Sectional Longitudinal
 - 1 cross-sectional and 1 longitudinal image (automatic)
 - 3 cross-sectional images and 1 longitudinal image (automatic)
 - 3 cross-sectional images with different angles and one longitudinal image (automatic)

\$79,039.00 ProMax Digital Pan/Ceph (1 transportable sensor)

\$90,579.00 ProMax Digital Pan/Ceph (2 fixed sensors: 1 for Ceph, 1 for Pan)

\$1315.00 Free Standing Base

\$105.00 Standard or SpaceSaver Wall Bracket

Upgrades:

\$8995.00 Film-based Panoramic to Film-based Pan/Ceph

\$29,365.00 Film-based panoramic to digital panoramic

\$45,244.00 Film-based Pan/Ceph to Digital Pan/Ceph (one transportable sensor)

\$60,333.00 Film-based Pan/Ceph to Digital Pan/Ceph (two fixed sensors)

Government Price: (Contents as listed above)

\$16,893.00 ProMax Film-Based Panoramic X-ray

\$21,597.00 ProMax Film-Based Pan/Ceph

\$32,106.00 ProMax Digital Panoramic (same items as above)

\$1754.00 Advanced Program Package

\$4140.00 Digital Linear Tomography Program

\$41,447.00 ProMax Digital Pan/Ceph (1 transportable sensor)

\$47,499.00 ProMax Digital Pan/Ceph (2 fixed sensors: 1 for Ceph, 1 for Pan)

\$690.00 Free Standing Base

\$55.00 Standard or SpaceSaver Wall Bracket

Upgrades:

\$4717.00 Film-based Panoramic to Film-based Pan/Ceph

\$15,398.00 Film-based panoramic to digital

\$23,725.00 Film-based Pan/Ceph to Digital Pan/Ceph (one transportable sensor)

\$23,725.00 Film-based Pan/Ceph to Digital Pan/Ceph (two fixed sensors)

ADVANTAGES:

- + Produces a wide variety of digital panoramic, temporomandibular, maxillary sinus, and linear tomography (with software upgrade) imaging
- + Optional panoramic imaging programs are available to improve imaging of osseous structures, reduce interproximal overlap, allow horizontal and vertical segmenting, and provide correction of magnification distortion
- + Pediatric panoramic program automatically reduces exposed area and patient radiation dose
- + Software upgrade provides five additional temporomandibular imaging programs
- + Software upgrade allows enhanced imaging of maxillary sinus and mid-skull features
- + Linear tomography software upgrade allows cross-sectional, longitudinal, and mixed cross-sectional longitudinal linear tomography images
- + Easy and intuitive to use
- + Software package allows numerous image enhancement features
- + Meets all electrical and radiation safety requirements
- + Cephalometric upgrade is available
- + Digital images are said to be exportable to cephalometric and surgical planning software programs

DISADVANTAGES:

- Software has not been evaluated for a Certificate of USAF Networkiness and presently cannot be used on computers that interface with local area networks or the internet
- Input of initial patient information may be time consuming and may reduce efficient processing of radiographs in high volume situations

SUMMARY AND CONCLUSIONS:

The ProMax is a multi-purpose digital panoramic unit that is also available in a film-based configuration. The unit is capable of panoramic, maxillary sinus, and TMJ imaging. The ProMax can be upgraded to add digital cephalometric imaging while additional software packages enhance panoramic, sinus, and TMJ imaging. The linear tomography upgrade allows 14 tomographic views. When purchased with cephalometric capability and software upgrades, the ProMax has the capability to meet the busy demands of a federal dental facility that provides general dental, orthodontic, oral surgery, and prosthodontic care. The clinical evaluators were very satisfied with the ProMax, finding it easy and intuitive to use. The unit produced excellent images and reduced the number of retakes experienced with other panoramic units. The ProMax easily met the demands of the USAF Dental Inprocessing Center and provided reliable function over the course of the evaluation. The Dimaxis software was reported to be easy to use and contain several useful functions for image enhancement. Although the ProMax system was highly regarded by the USAF Dental Inprocessing Staff and the Consultant for Oral and Maxillofacial Radiology, the Dimaxis software, similar to other digital radiology programs, has not currently received certification/accreditation for use on USAF local area networks. However, this system can be used on a stand-alone computer that does not interface with any local area network. The **ProMax** is rated **Acceptable** for use by the federal dental services.